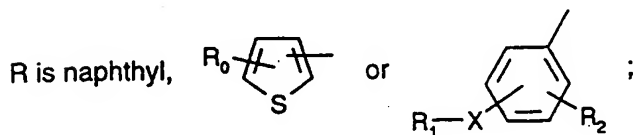
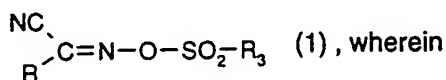


What is claimed is:

1. A composition which can be activated by light, comprising
  - a) at least one compound which may be crosslinked by the action of an acid and/or
  - b) at least one compound which changes its solubility under the action of an acid, and
  - c) as photoinitiator at least one compound of formula 1



R<sub>0</sub> is either an R<sub>1</sub>-X group or R<sub>2</sub>;

X is a direct bond or an oxygen atom;

R<sub>1</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl which is unsubstituted or substituted by phenyl, OH or C<sub>1</sub>-C<sub>4</sub>-alkoxy or which may be interrupted by an -O-atom, or R<sub>1</sub> is a phenyl group which is unsubstituted or substituted by a substituent selected from the group consisting of chloro, bromo, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkyloxy;

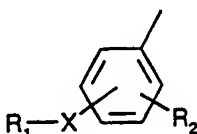
R<sub>2</sub> is hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl; and

R<sub>3</sub> is straight-chain or branched C<sub>1</sub>-C<sub>12</sub>alkyl, which is unsubstituted or substituted by one or more than one halogen atoms, or is phenyl-C<sub>1</sub>-C<sub>2</sub>alkyl or campheryl.

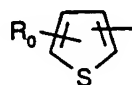
2. A composition according to claim 1, comprising further photoinitiators, sensitisers and/or additives besides component c).
3. A chemically amplified positive photoresist which is developable in alkaline medium and which is sensitive to radiation in the wavelength from 340 to 390 nanometers, which resist is based on oxime alkyl sulfonates as photosensitive acid generator and contains a compound of formula 1 as claimed in claim 1 as oxime alkyl sulfonate.
4. A chemically amplified negative photoresist which is developable in alkaline medium and which is sensitive to radiation in the wavelength from 340 to 390 nanometers, which resist is

based on oxime alkyl sulfonates as photosensitive acid generator and contains a compound of formula 1 as claimed in claim 1 as oxime alkyl sulfonate.

5. A photoresist according to either claim 3 or claim 4, which comprises a compound of

formula 1, wherein R is  ; X is a direct bond or an oxygen atom; R<sub>1</sub> is C<sub>1</sub>-C<sub>4</sub>alkyl or phenyl; R<sub>2</sub> is straight-chain or branched C<sub>1</sub>-C<sub>12</sub>alkyl which is unsubstituted or substituted by one or more than one halogen atom.

6. A photoresist according to either claim 3 or claim 4, which comprises a compound of

formula 1, wherein R is  ; R<sub>0</sub> is hydrogen, and R<sub>3</sub> is straight-chain or branched C<sub>1</sub>-C<sub>12</sub>alkyl which is unsubstituted or substituted by one or more than one halogen atom.

7. A negative photoresist according to any one of claims 4 to 6, comprising an oxime alkyl sulfonate of formula 1, an alkali-soluble phenolic resin as binder and a component that, when acid-catalysed, undergoes a crosslinking reaction with itself and/or with the binder.

8. A negative resist according to claim 7, comprising 1 to 15 % by weight of the oxime alkyl sulfonate, 40 to 80 % by weight of a phenolic resin as binder and 5 to 30 % by weight of an amino resin as crosslinking agent, the percentages being based on the solids content of the composition.

9. A negative resist according to claim 8, comprising N-methoxymethylmelamine or tetramethoxymethyl glucoril and N,N'-dimethoxymethylurone in high purity or technical form as amino resin.

10. A positive photoresist according to either claim 3, claim 5 or claim 6, comprising a compound of formula 1 and at least one compound that substantially prevents the composition from dissolving in an alkaline developer, but that can be cleaved in the presence of an acid in such a manner that reaction products remain that are soluble in the developer and/or that

cause an acid-resistant additional binder that would otherwise be virtually insoluble in the developer to dissolve in the developer.

11. A positive resist according to claim 10, comprising 75 to 99.5 % by weight of a film-forming polymer that contains protective groups that can be removed by acid catalysis, and from 0.5 to 25 % by weight of oxime alkyl sulfonates of formula I, the percentages being based on the solids content of the compositions.

12. A positive resist according to claim 10, comprising 40 to 90 % by weight of an acid-inert film-forming polymer as binder, 5 to 40 % by weight of a monomeric or polymeric compound having protective groups removable by acid catalysis, and 0.5 to 25 % by weight of oxime alkyl sulfonates of formula I, the percentages being based on the solids content of the compositions.

13. A photoresist according to either claim 3 or claim 4, comprising polymers that are transparent up to the wavelength region of 180 nm.

14. A process for the production of images, which comprises coating a substrate with a composition according to either claim 1 or claim 2 or with a resist composition according to any one of claims 3 to 13, irradiating the coating with radiation having a wavelength of 340 to 390 nanometers in a desired pattern and, after a heating period, removing the more soluble parts of the coating with an aqueous-alkaline developer.

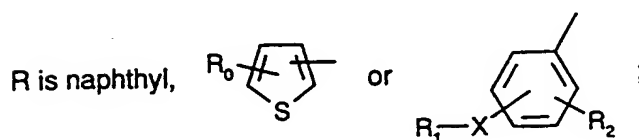
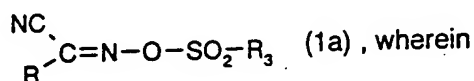
15. Use of oxime alkyl sulfonate compounds of formula 1 as claimed in claim 1 as photo-sensitive acid generator in a photoresist sensitive to radiation at a wavelength of up to 390 nanometers.

16. Use of oxime alkyl sulfonate compounds of formula 1 as photoinitiators for compounds which can be crosslinked by the action of an acid or/and as dissolution inhibitors for compounds which change their solubility under the action of an acid.

17. Use of the composition according to either claim 1 or claim 2 for the production of printing plates, colour filters, resist materials and image recording materials.

18. Use of compounds of formula 1 as photosensitive acid generator sensitive to radiation in the wavelength of below 390 nm for the production of printing plates, colour filters, resist materials or image recording materials, or of image recording materials for holographic images.

19. A compound of formula 1a



R<sub>0</sub> is either a R<sub>1</sub>-X group or R<sub>2</sub>;

X is a direct bond, an oxygen atom or a sulfur atom;

R<sub>1</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl or a phenyl group which is unsubstituted or substituted by a substituent selected from the group consisting of chloro, bromo, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkyloxy;

R<sub>2</sub> is hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl; and

R<sub>3</sub> is straight-chain or branched C<sub>1</sub>-C<sub>12</sub>alkyl which is unsubstituted or substituted by one or more than one halogen atom,

with the proviso that, if R<sub>3</sub> is methyl, R is not naphthyl, phenyl or 3-thienyl.

20. A compound of formula 1a according to claim 19, wherein X is a direct bond or an oxygen atom; R<sub>1</sub> is hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl, and R<sub>3</sub> is straight-chain or branched C<sub>1</sub>-C<sub>8</sub>alkyl which is unsubstituted or substituted by one or more than one halogen atom, or CCl<sub>3</sub> or CF<sub>3</sub>.

21. α-(Methylsulfonyloxyimino)-4-methoxybenzylcyanide, α-(methylsulfonyloxyimino)-3-methoxybenzylcyanide, α-(methylsulfonyloxyimino)-4-methylbenzylcyanide, α-(methylsulfonyloxyimino)-3,4-dimethylbenzylcyanide, α-(methylsulfonyloxyimino)thiophene-2-acetonitrile, α-(isopropylsulfonyloxyimino)thiophene-2-acetonitrile, α-(butylsulfonyloxyimino)thiophene-2-acetonitrile, α-(octylsulfonyloxyimino)thiophene-2-acetonitrile, α-(dodecylsulfonyl-

oxyimino)thiophene-2-acetonitrile,  $\alpha$ -(dodecylsulfonyloxyimino)thiophene-2-acetonitrile,  $\alpha$ -(3-chloropropylsulfonyloxyimino)thiophene-2-acetonitrile,  $\alpha$ -(trifluoromethylsulfonyloxyimino)thiophene-2-acetonitrile,  $\alpha$ -(octylsulfonyloxyimino)-4-methoxybenzylcyanide,  $\alpha$ -(3-chloropropylsulfonyloxyimino)-4-methoxybenzylcyanide.